

Measures and Determinants of Smokeless Tobacco Use Prevention and Cessation

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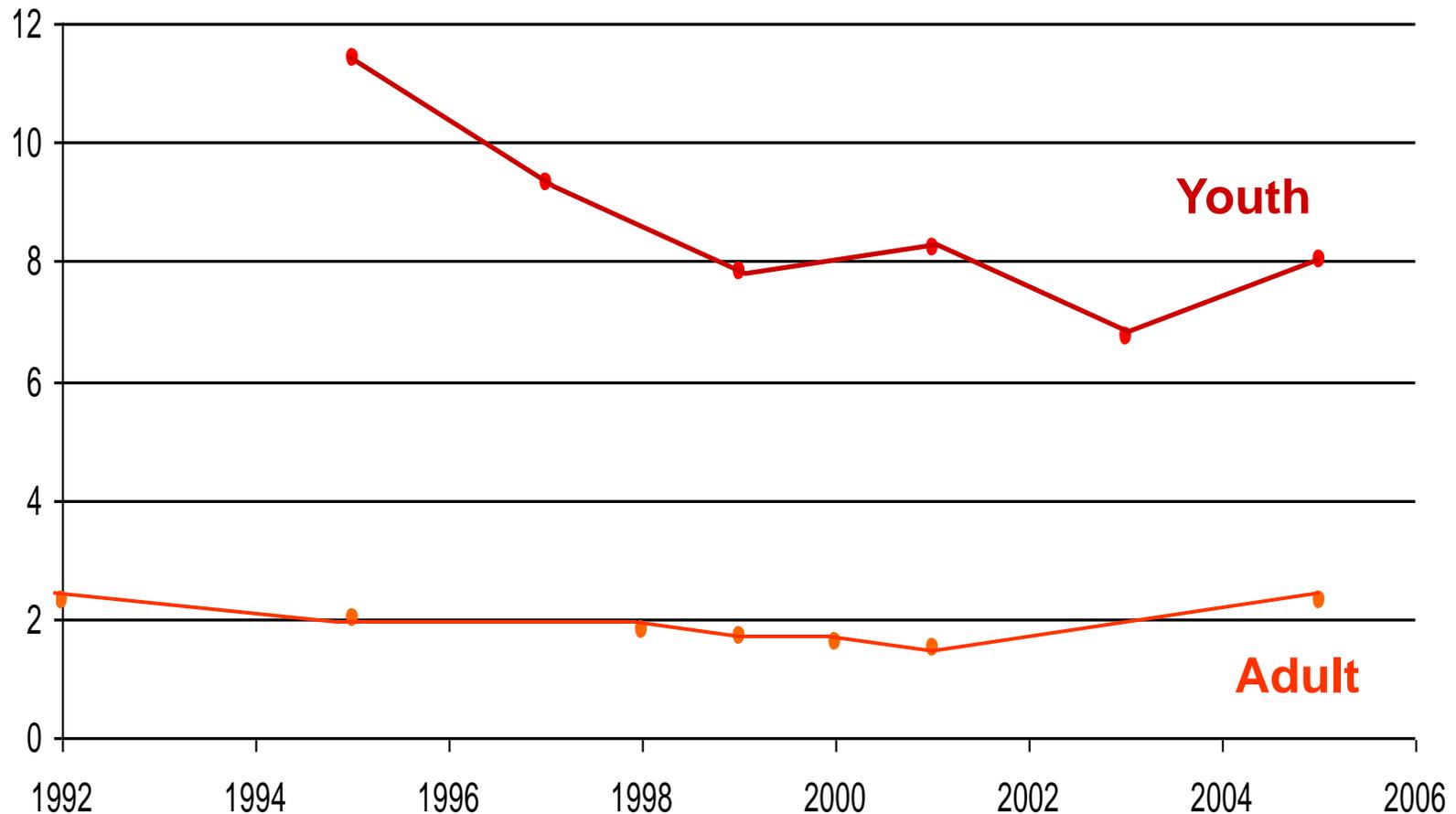


Purpose of the RFA

- Understand the progression to ST use and its relationship to other tobacco use
- Identify and evaluate factors that mediate initiation and use of ST in high risk populations
- Develop and apply methods for characterizing the properties of a range of ST products and related behaviors
- Encourage new and experienced tobacco researchers to focus on ST

Smokeless Tobacco Use (%) Among U.S. Adults and High School Students, 1992-2005

7.7 million ST users 12 years and over in the U.S.



Source: Adults: Current Population Survey - Tobacco Use Supplement, 1992/93, 1995/96, 1998-2000, 2001/02; NHIS 2005

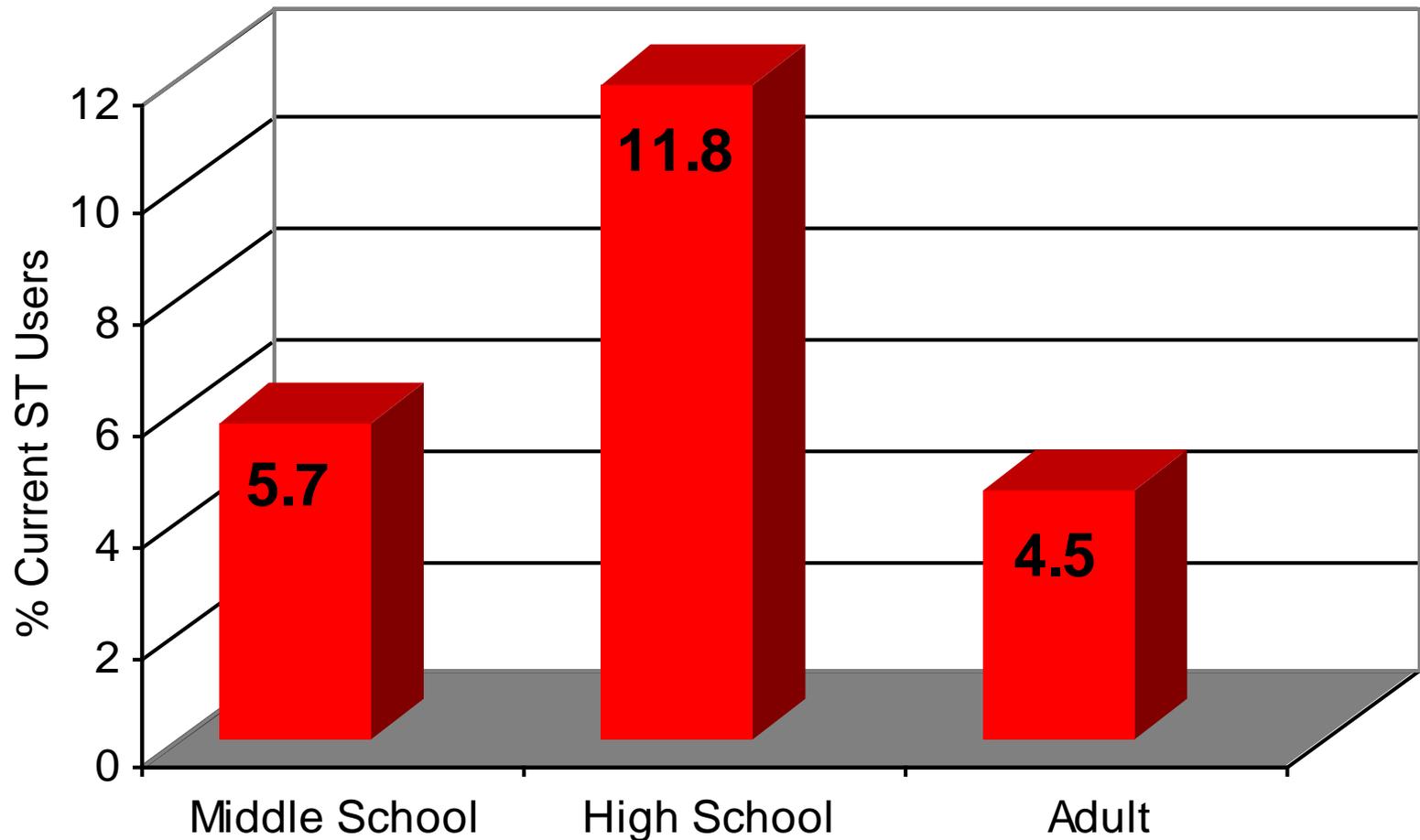
Youth: National Youth Risk Behavior Survey, 1995-2005

Smokeless Tobacco: At Risk Populations

- **Midwestern and Southern States**
 - 6.7% and 4.4% of Adults in South and Midwest
- **Racial/Ethnic Groups**
 - 9% of Native Americans
 - 22% of Alaska Natives
- **Young Males**
 - 12.6% of 12th Grade Boys
 - 15.1% of White 12th Grade Boys
- **Military Personnel**
 - 24% of White Active Military Men

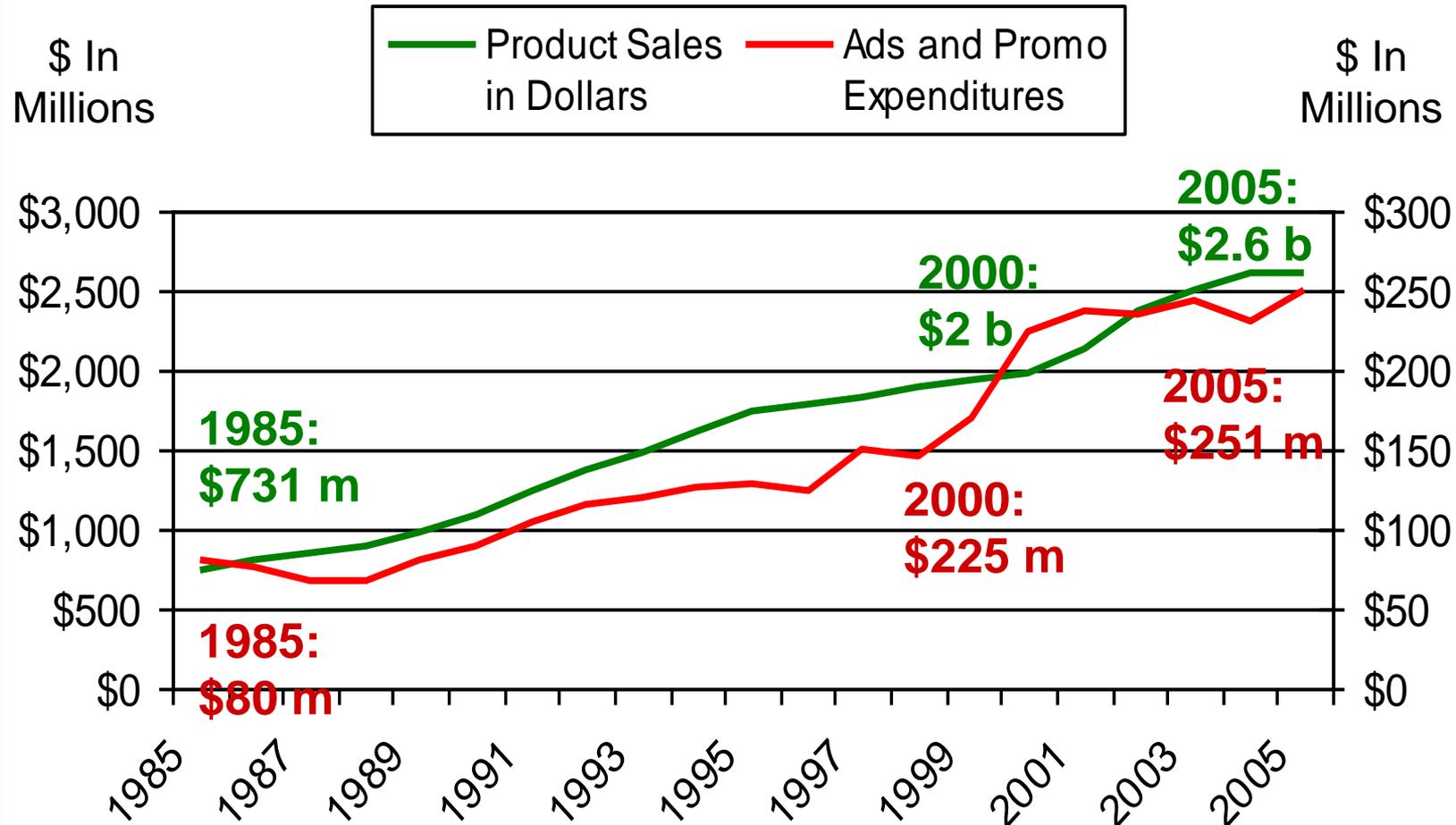
Source: Nelson et al. Trends in smokeless tobacco use among adults and adolescents in the U.S.. Am J Public Health 2006;96(5):897-905; Nelson et al. Trends in smokeless tobacco use among men in four states, 1988 through 1993. Am J Public Health 1996;86(9):1300-3.

Prevalence of Current Smokeless Tobacco Use among Male Adolescents and Adults.



Source: Data from Nelson, D.E., et al., Trends in smokeless tobacco use among adults and adolescents in the U.S. *Am J Public Health*, 2006. 96(5): p. 897-905; Tobacco Use Among Middle and High School Students -U.S., 2002. *MMWR CDC Surveill Summ*, 2003. 52(45): p. 1096-1098.

Total ST Sales and Advertising & Promotional Expenditures as reported by FTC, 1985-2005



New Smokeless Tobacco Products

- Cigarette brand extensions from major manufacturers
 - Marlboro Snus
 - Camel Snus
- Attractive flavorings
 - Mint, spices
- Tobacco pouches that don't require spitting
- Novel formulations
 - Ariva tobacco lozenge



Smokeless Tobacco Product Marketing



**Enjoy tobacco
inside the office?
You bet.**

Enjoy tobacco the smoke-free way with Copenhagen® or Skoal®. Copenhagen offers legendary natural tobacco flavor, while Skoal comes in a variety of great tasting flavors that are sure to satisfy. They also make it easy to enjoy tobacco on your own terms. Try a rich satisfying pinch of long cut, or easy-to-use pouches. So maybe it's time to find your solution – and leave the smoke behind.

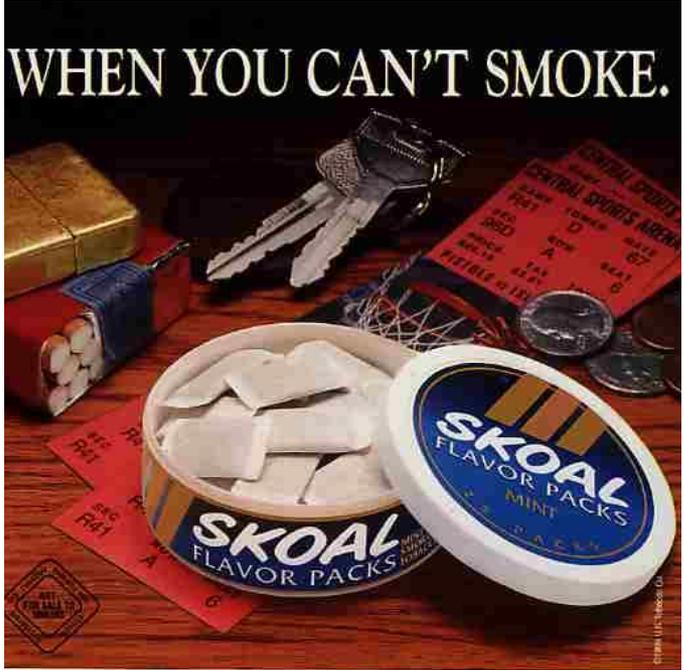
Break from the pack.™

WARNING: THIS PRODUCT MAY CAUSE GUM DISEASE AND TOOTH LOSS.

Visit TrySmokeless.com for more info and savings.

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WHEN YOU CAN'T SMOKE.



**INTRODUCING
SKOAL FLAVOR PACKS.**

Skoal Flavor Packs give you great tasting tobacco satisfaction. They're small, discreet pouches that are easy to use and control. With long lasting flavor in either cool mint or refreshing cinnamon. And because they're a smooth blend of tobacco, they'll never taste harsh or bitter.

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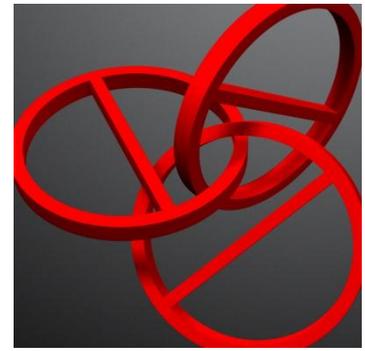
What We Know about Smokeless Tobacco

- Smokeless tobacco causes oral and pancreatic cancer in humans. Over 28 carcinogens identified in ST.
- ST use is higher among adolescents and may interact with initiation of cigarette smoking
- Limited evidence for the effectiveness of some behavioral counseling interventions for ST cessation
- However, pharmacotherapies have not been shown to be effective for ST use cessation

What We Don't Know about Smokeless Tobacco

- What is the overall public health impact of ST use
- What are the key determinants of initiation and use in high risk groups
- What are the best measures of smokeless tobacco use and behavior
- How does marketing of new products impact prevalence

Urgent Research Needs



"The paucity of evidence about smokeless tobacco in the U.S. leaves many questions unanswered."

- Smokeless tobacco use is associated with numerous health risks
- There are limited data about the effect of smokeless tobacco on public health
- New products and aggressive marketing may increase use of smokeless tobacco
- More research is needed to determine the overall effect of marketing and use of these products

Potential Research Questions

- What are the best measures for smokeless tobacco use behavior and exposure?
- How do the characteristics of different smokeless tobacco products affect behavior?
- What key factors contribute to initiation and prevalence of use among high risk groups?
- How does ST use interact with other forms of tobacco use?
- To what extent does ST act as a gateway to cigarette smoking?
- How does marketing of new ST products impact prevalence of tobacco use?

Evaluation

- Increase the number of new applications received focusing on smokeless tobacco and bring new researchers to the field.
- Identify at least four key determinants of smokeless tobacco use in high risk groups.
- Support at least one study to directly address whether smokeless tobacco acts as a gateway to smoking among youth and young adults.
- Develop at least two new measures of smokeless tobacco use and exposure.

Scope of RFA Initiative

- This RFA will support 8-10 grants over four years
- Both R01 and R21 mechanisms
- The projected cost for this initiative is \$2.5 million in FY2009, with a total investment over four years of \$8-10 million